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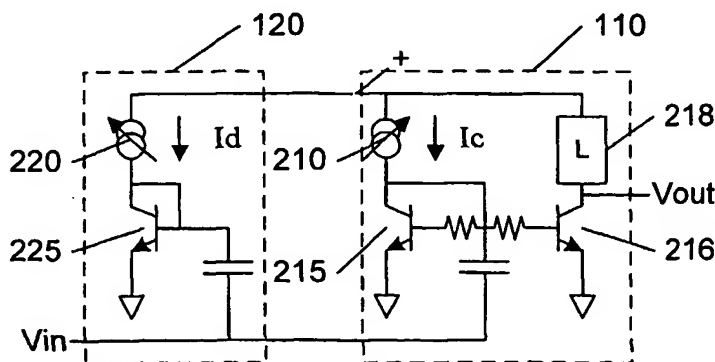
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(54) Title: VARIABLE GAIN AMPLIFIER WITH IMPROVED CONTROL CHARACTERISTICS LINEARITY



(57) Abstract: A variable-impedance device is placed in parallel with the input to a variable-gain amplifier, and is controlled so as to provide a substantially constant load impedance to a source. Preferably, the variable-impedance device includes a diode with a variable bias current. This diode bias current is adjusted inversely with the amplifier bias current, such that the parallel sum of the two input path impedances remains approximately constant across a wide range of gain. This variable gain amplifier system is particularly well suited for use in a wireless transmitter, or cellular telephone.

INTERNATIONAL SEARCH REPORT

International Application No

PCT 03/03512

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H03G1/00 H03F1/32 H03F1/30 H03F3/343

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H03G H03F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT 03/03512

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	US 3 512 096 A (AOKI NOBUHIKO ET AL) 12 May 1970 (1970-05-12) column 3, line 42 - column 4, line 21; figure 2 -----	1,10
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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